



Effective Education, Outreach, and Public Participation for MS4 Permits

About the Author

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The Cumberland County Soil and Water Conservation District (CCSWCD) works “to assist and educate the public to protect soil and water resources”. Founded in 1946 and based in Windham, Maine, CCSWCD coordinates water quality improvement programs throughout the Southern Maine region. CCSWCD facilitates the Interlocal Stormwater Working Group (ISWG), a regional approach of 14 municipalities and two nested MS4 to implement stormwater permit requirements. In addition, CCSWCD implements MCM 1 and MCM 2 requirements for ISWG.

Founded in 2001, New England Environmental Finance Center (NEEFC) is one of 10 national Environmental Finance Centers. It seeks to advance the shared goal of US EPA and the Edmund S. Muskie School of Public Service at the University of Southern Maine to research, publish, and extend creative approaches to environmental policy, protection and management, especially the associated questions of how to pay for needed environmental improvements. Under the Direction of Martha Sheils, the New England EFC engages in projects to provide innovative financing solutions to manage state, local and tribal environmental programs.



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I. Summary

This report considers the various methods being used across the county to maximize effective Clean Water Act Municipal Separate Storm Sewer System (MS4) Minimum Control Measures 1 and 2 (MCM 1 and MCM 2) compliance. Multiple factors were considered in researching each of these municipalities, including MCM 1 and MCM 2 requirements, sources of funding, target pollutants, target audiences, outreach and evaluation methods, and interlocal collaborations. This report seeks to identify the pros and cons of various approaches to meet MS4 compliance, along with identifying MCM 1 and MCM 2 methods that are deemed unique or highly effective. Finally, this report makes recommendations to communities who may be seeking to maximize the effectiveness of their MS4 permit public outreach, education, and participation requirements. The full documentation of collected data can be found in Appendix A.

II. Background

This report summarizes and analyses approximately 20 MS4 communities across the United States with the goal of researching effective public education, outreach, and participation practices. Other entities in this study include nested MS4s, which are not municipalities, but rather large government or public entities that are exempt from municipal taxation such as universities, military bases, and health centers. The study was requested by the Maine Interlocal Stormwater Working Group, which is a coalition of 14 municipalities and two nested MS4s in the greater Portland and Saco areas¹ of Maine that work collaboratively to implement the Clean Water Act MS4 permit. Maine MS4 communities address stormwater issues regionally through stormwater working groups. There are four stormwater working groups, Androscoggin Valley (AVSWG), Bangor Area (BASWG), Interlocal (ISWG), and Southern Maine (SMSWG). The permit aims to reduce the impact of stormwater pollution on local waterways. In Maine, the Department of Environmental Protection administers this permit on behalf of the US Environmental Protection Agency. This study seeks to create recommendations for MS4 communities here in Maine, as well as other states.

MS4 designation is determined by the US Census Bureau decennial census results and Urbanized Area delineation. Urban Areas contain significant commercial and residential development which produce large amounts of stormwater runoff. Urbanized Areas are based on criteria including population density, proximity to other urbanized areas, and impervious cover. Large public institutions and agencies within MS4 communities, like college campuses and hospital complexes, are separate parts of the MS4 program because of their mix of independent stormwater infrastructure and shared stormwater systems connected to municipal stormwater systems.

The authorization that MS4 communities get from regulators to legally discharge stormwater into local streams and rivers is referred to as a National Pollution Discharge Elimination System (NPDES) permit. The word “National” references the connection with the Federal Clean Water Act and the word “Discharge” refers to the fact that separate storm sewer systems eventually release stormwater into waters of the state untreated. There are two types of NPDES permits, Phase I and Phase II. Phase I permits are for cities with populations over 100,000 people, while Phase II covers many municipalities with fewer than 100,000 people. EPA manages the NPDES stormwater program in four states (Idaho, Massachusetts, New Hampshire, and New Mexico), plus the District of Columbia and most U.S. territories, and has delegated that authority to the remaining 46 states and the Virgin Islands.²

These particular NPDES permits are also commonly called “MS4 Permits”. To meet the terms of their NPDES Permit, communities need to develop a unique “Stormwater Management Plan” (SWMP) to address their stormwater challenges. MS4 communities must also create opportunities during the planning and implementation process for public participation and feedback to align with the “Remand Rule” mandated in 2017. Every SWMP includes the same six focus

¹ Biddeford, Cape Elizabeth, Cumberland, Falmouth, Freeport, Gorham, Old Orchard Beach, Portland, Saco, Scarborough, South Portland, Southern Maine Community College, University of Southern Maine, Westbrook, Windham, and Yarmouth

² <https://www.everycrsreport.com/reports/97-290.html>

areas that the EPA considers essential for success, called Minimum Control Measures (MCMs). This document focuses on MCM 1: Public Education and Outreach and MCM 2: Public Participation and Involvement.³

III. Demographics of Municipalities Studied

Municipalities selected for this study were based on multiple factors, including MCM 1 and MCM 2 requirements, sources of funding, target pollutants, target audiences, outreach and evaluation methods, and interlocal collaborations (Table 1). Other factors such as location (climate, land use patterns, etc.), Phase I versus Phase II, and state versus EPA authority were also considered.

TABLE 1. DEMOGRAPHICS OF MUNICIPALITIES REFERENCED.

	Population	Square Miles
Peoria, AZ	168,181	179.2 mi ²
Santa Barbara, CA	92,101	41.99 mi ²
Hartford, CT	123,400	17.95 mi ²
Wilmington, DE	71,106	16.94 mi ²
Evanston, IL	74,756	7.83 mi ²
Boston, MA	685,094	89.63 mi ²
Lewiston, ME	36,221	35.54 mi ²
Portland, ME	67,000	69.44 mi ²
Lansing, MI	116,986	36.68 mi ²
Rochester, MN	115,733	55.48 mi ²
Portsmouth, NH	21,796	16.83 mi ²
Bend, OR	94,520	33.27 mi ²
Eugene, OR	168,916	40.54 mi ²
Roanoke, VA	96,714	42.85 mi ²
Burlington, VT	42,239	15.48 mi ²
South Burlington, VT	19,141	29.58 mi ²
Olympia, WA	51,609	20.09 mi ²
Yakima City, WA	93,667	28.21 mi ²
Kenosha, WI	99,877	27.99 mi ²

³ <https://extension.psu.edu/what-is-an-ms4>

IV. Funding Methods for MCM 1 and MCM 2

Stormwater requirements cannot be met without funding. This study considered common approaches to MS4 compliance funding, stormwater utility fees, regional funding, and department funding.

A. Stormwater Utility Fees

Stormwater utilities are increasing in their popularity for funding stormwater programs. Established by a few communities in the 1970s as a method of funding flood control measures, the Western Kentucky University Stormwater Utility survey of 2019 identified 1,716 U.S. stormwater utilities nationwide and 29 in Canada. There are now 6 states with 100 or more stormwater utilities. Forty states and DC have at least one stormwater utility⁴.

While other options exist to fund stormwater programs, the utility approach has been identified in several analyses as the most equitable and effective approach to stormwater financing. Stormwater utilities have the following benefits:

- They provide a stable, dedicated, and adequate funding source for stormwater programs, which tend to be a lower priority under the traditional General Fund allocation process. With a reliable and sufficient funding source in place, stormwater managers can systematically address needs, instead of deferring them;
- They offer a more equitable system for raising revenues for stormwater management, basing fees on actual runoff impact, rather than property value. Under a stormwater fee system, non-profits and other tax-exempt entities that contribute stormwater are generally charged just like other properties. In general, user fees have the effect of shifting some of the burden of managing stormwater from residential to other properties; and
- They have potential to positively affect behaviors, especially when fees are based on impervious surfaces, or a system of credits are put into the system. At the very least, they raise awareness about the connection between human development activities and polluted runoff.

A primary challenge with implementing stormwater fees is gaining public acceptance and approval. In a political climate where anything that looks like a new tax is viewed with suspicion, creating new public funding sources is no mean feat. Communities that have been successful have put considerable resources into educating both the public at large and decision-makers about the merits of user fees and stormwater management in general. A second challenge is to fashion an approach to stormwater fees that works well for the community. Difficult decisions must be made regarding a number of considerations such as how the fee is to be structured, to whom and where it will apply, and what expenses it will cover. For each of these considerations, a range of options exist. In some cases, the lessons learned from other communities provide guidance on the merits of particular options. There is no “best” model that works well in all type of regions and communities⁵.

1. Square footage

Many municipalities fund their MS4 compliance efforts through charging a stormwater fee that is based on the amount of impervious surface. Property owners pay a fee based upon the square footage of impervious surface on their property. Nationwide, various municipalities charge fees at different rates. Some municipalities that use square footage stormwater fees include:

Roanoke, VA: Roanoke charges a universally applied fee of \$0.90 per 500 square feet of impervious surface to fund stormwater marketing and social media development.

Wilmington, DE: Wilmington charges various fees for residential and nonresidential properties (Table 2). They also offer ways to lower costs by gaining credits to all property owners. According to the City of Wilmington, stormwater credits can be obtained by the construction, operation, and maintenance of privately owned stormwater management facilities

⁴ https://digitalcommons.wku.edu/cgi/viewcontent.cgi?article=1000&context=seas_faculty_pubs

⁵ New England Environmental Finance Center, “Stormwater Utility Fees: Considerations & Options for Interlocal Stormwater Working Group (ISWG), May 2005

and/or non-structural best management practices that complement the City’s stormwater management efforts and support the City’s combined sewer overflow mitigation, stormwater management, and surface water quality protection activities.⁶ It is important to note that there is a \$100 charge per parcel to apply for stormwater credits.

Table 2. Wilmington, Delaware’s stormwater fee tiers based on impervious area.⁷

Tier	Impervious Area (square feet)	Equivalent Storm Water Unit Ratio (ESU ratio)	Monthly Stormwater Charge
Tier 1	0 to 799	1.00	\$4.95
Tier 2	800 to 1,299	1.45	\$7.18
Tier 3	1,300 to 2,399	2.48	\$12.27
Tier 4	2,400 and over	4.40	\$21.78

Bend, OR: Bend’s monthly stormwater service charge is based on impervious surface coverage and is set at \$5.46 per Equivalent Residential Unit (ERU). One ERU is equivalent to 3,800 square feet of impervious surface coverage, which is the average amount of impervious surface for a single-family residence in Bend.

Yakima, WA: Yakima charges a stormwater fee based on several variables, including types of housing and businesses. They define impervious surfaces as roofs, paved driveways, concrete patios, and other hard surfaces that do not allow water to pass through. Yakima charges an annual “base rate” for stormwater fees. This base rate increases by approximately a dollar every year (\$73 in 2019). The base rate is based on the average single-family home size. Residences larger or smaller than the size of the average single-family home are calculated from the base rate. Owners of nonresidential parcels pay a stormwater fee equal to the base rate multiplied by the number of average residential properties it could fit. Property owners can mitigate their property to get credits to reduce their stormwater fees.⁸

Portland, ME: Portland charges based on total impervious area in square feet divided by 1,200 and then rounded to the nearest whole number. This number is the billable unit which is multiplied by the current rate for the monthly amount. For example, if the total impervious area is 2,282 square feet, the billable unit is 2. The billable unit (2) is multiplied by the current rate (\$6.30) for a total fee of \$12.60 per month. If receiving a quarterly bill, then the amount due would be \$37.80 (3 months x \$12.60). Property owners can mitigate their property to get credits to reduce their stormwater fees.

2. Baseline fee

For the purposes of this study, a baseline fee is a non-regional fee or formula that is applied to all types of property.

Rochester, MN: Rochester charges a baseline fee. The fee is calculated by multiplying a Land Use Factor (LUF) of 1.0 by an average parcel size of 0.235 acres times the stormwater unit rate, as established by council resolution. [Fee = (LUF= 1.0) x (parcel size=0.235 acres) x (stormwater unit rate)]. For example, all condominiums are considered to be 0.025 acres with 100 percent impervious area. The condominium fee is calculated by multiplying a Land Use Factor of 5.0 by an average parcel size of 0.025 acres times the stormwater unit rate. [Fee = (LUF= 5.0) x (parcel size=0.025 acres) x (stormwater unit rate)].

⁶ <https://www.wilmingtonde.gov/government/city-departments/public-works/stormwater-charge>

⁷ <https://www.wilmingtoncitycouncil.com/wp-content/uploads/2017/09/sub-1-to-ord-17-009-amend-ch45-water-sewer-stormwater-rates.pdf>

⁸ <https://www.yakimawa.gov/services/wastewater-treatment-plant/stormwater/stormwater-assessment-fees/>

B. Regional Funding

Regional funding is a common strategy where MS4 communities pool resources to fund stormwater efforts. While individual communities may raise their funds through stormwater fees or municipal budgets, they contribute funds towards a regional effort to collectively implement certain aspects of their MS4 permit requirements.

Lansing, MI: The municipalities surrounding Lansing all pay into a tri-county group. Each city has yearly dues they pay into the program to create an annual budget (the 2018 budget for the Greater Lansing area was **\$125,500**). Instead of funding through a more complex square footage method, the City of Lansing sets aside money to pay into the tri-county collaboration every year through their utility fee.

Interlocal Stormwater Working Group, ME: ISWG uses a flat due for municipalities in order to implement MS4 MCM 1 and MCM 2 activities. ISWG dues for municipalities fluctuate each year based on permit compliance needs but is generally around \$10,800 per municipality with the nested MS4s (non-municipalities) paying 39% of the municipal rate.

Bangor Area Stormwater Working Group, ME: Annual dues are calculated based on the percentage of Urbanized Area (UA) each Member has of the total for all Members (Table 3). Each municipality votes for an “option” to funding each year.

TABLE 3. EXAMPLE OF BASWG ANNUAL DUE CALCULATIONS BASED ON PERCENTAGE OF URBANIZED AREA PER MEMBER.

Member Assessments	Option A	Option B	Option C	Percentage of Budget
City of Bangor	\$4,843.80	\$6,000.00	\$6,600.00	15.60%
City of Brewer	\$3,229.20	\$4,000.00	\$4,400.00	10.40%
Town of Hampden	\$3,229.20	\$4,000.00	\$4,400.00	10.40%
Town of Milford	\$2,421.90	\$3,000.00	\$3,300.00	7.80%
City of Old Town	\$3,229.20	\$4,000.00	\$4,400.00	10.40%
Town of Orono	\$3,229.20	\$4,000.00	\$4,400.00	10.40%
Town of Veazie	\$2,421.90	\$3,000.00	\$3,300.00	7.80%
University of Maine	\$3,229.20	\$4,000.00	\$4,400.00	10.40%
Maine Air National Guard	\$1,304.10	\$1,600.00	\$1,760.00	4.20%
UMA-Bangor	\$1,304.10	\$1,600.00	\$1,760.00	4.20%
Eastern Maine Community College	\$1,304.10	\$1,600.00	\$1,760.00	4.20%
Dorethea Dix Psychiatric Center	\$1,304.10	\$1,600.00	\$1,760.00	4.20%
				100.00%
	\$31,050.00	\$38,400.00	\$42,240.00	

C. Department Funding Out of a Municipal Budget

Some municipalities choose to “go it alone” and maintain compliance through department funding from the municipal budget. Stormwater programs are often housed under the Public Works Department.

Peoria, AZ: Peoria does excellent work implementing MCM 1 and MCM 2. They hold many workshops and trainings for public works employees. They have a small presence on social media but their events are well attended. Peoria has a budget of \$75,000 per year for their MS4 MCM 1-6 compliance efforts.

V. Reaching Compliance

Communities weigh multiple factors, including permit requirements, budgets, shared problems, and shared goals when developing their SWMP. Some municipalities have found it is more cost-effective to work collectively to reach permit compliance while others have independently reached compliance.

A. Regional collaboration

Similar to ISWG, many municipalities choose to work with their neighbors. Here are some examples of municipalities around the country who have found regional collaboration to be beneficial:

Burlington & South Burlington, VT: Chittenden County Regional Planning Commission (**19 Municipalities**)

Wilmington, DE: New Castle County (**15 Municipalities**)

Peoria, AZ: "STORM" - Regional Collaboration (**21 Municipalities, 3 Nested MS4s**)

Santa Barbara, CA: Santa Barbara County (**25 Municipalities, 1 Nested MS4**)

Kenosha, WI: County Commission (**13 Municipalities**)

Lansing, MI: Greater Lansing Regional Committee for Stormwater Management (GLRC) (**14 Municipalities, 2 Nested MS4s**)

Portsmouth, NH: Seacoast Stormwater Coalition (**19 Municipalities**)

B. Independent efforts

Other municipalities implement their stormwater programs by themselves, either completely in-house or with the assistance of a consulting or marketing organization. Examples of successful independent municipality stormwater compliance programs include Evanston, Illinois and Eugene, Oregon.

C. Success Stories:

Regional collaboration: Chittenden County Regional Planning Commission (Burlington, VT area): CCRPC is the county government organization that works to assist the 12 Burlington area municipalities reach MS4 education & outreach compliance. CCRPC's subcommittee, the Clean Water Advisory Committee, assists to successfully reach thousands of people every year. Additionally, they have significant interaction on social media and attendance to events with a wide audience. The CCRPC contract out a marketing firm, Pluck, to run the MS4 social media and [website](#).

Independent effort: Eugene, OR: Eugene instructs over 2,000 schoolchildren, installs over 200 drain covers, conducts well attended events, and effectively surveys their residents. Eugene supports their MS4 compliance on their own through a \$10 per month stormwater fee for all residential properties, as well as a fee for commercial properties.

VI. Marketing

A. With a Marketing Firm

Marketing firms are hired to implement marketing strategies, run social media accounts, and conduct outreach on behalf of an organization or business, among other similar duties. They seek to engage with the target audiences in the MS4 community and maximize outreach. MS4 communities often outsource their MCM 1 and MCM 2 efforts to marketing organizations, which can be for-profit or nonprofit groups. Annual marketing costs range from a few thousand to tens of thousands of dollars that are commonly supported by stormwater utilities.

Roanoke, VA: As part of the Clean Valley Council, Roanoke pays \$20,000 per year to implement MCM 1 and MCM 2 on their behalf. The Clean Valley Council uses strategically targeted internet advertisements and increase their social media following each year. The marketing firm also distributes literature and weekly newsletters with updates to residents throughout the city.

South Burlington, VT: South Burlington spends \$7,800 annually for [Pluck](#), a local marketing firm, to implement their MCM 1 and MCM 2 tasks. Pluck helps South Burlington and surrounding MS4 communities stay in compliance by tracking social media interactions, numbers of attendees, and provides consultation to the communities. South Burlington funds Pluck through their stormwater fee. Additionally, South Burlington uses the CCRPC's Regional Stormwater Education Program to distribute educational materials and host events.

B. Using Internal Staff

Bend, OR: The City of Bend is able to create an exceptionally effective public outreach and education plan. Notable efforts are their self-selecting email campaign, which has over 6,000 people subscribed (the population of Bend is 95,000). As Bend outlines in their annual report, if subscribers are self-selecting, they are probably reading it. Bend also keeps track of how long people spend on their website (an average of 1 minute and 30 seconds). Additionally, they use multiple videos and partner with local groups/companies to deliver messaging points. They also have a training video that they show new city employees, among other outreach efforts. It is important to note that Bend has a monthly stormwater fee of approximately \$5.46 per residential property (single family home). Their annual stormwater utility revenue totals \$820,000. This fee allows them to fund such an extensive outreach program.

Rochester, MN: In 2018 Rochester had 4,385 volunteers picked up over 15,000 pounds of litter at 307 sites, constructed 2 residential rain gardens, and marked 280 storm drains. For a city of approximately 100,000, they had 49 stormwater related events which had 13,665 presentation attendees and activity participants. Rochester heavily funds their municipal stormwater efforts and primarily does outreach through physical outreach and classroom methods, instead of social media.

VII. Social Media

Social media is an incredibly effective method of outreach in our society. A large majority of people use social media to some degree. A [survey](#) from the Pew Research Center found that Americans use YouTube the most, at 73 percent (2019). The second most popular social media site is Facebook, with 69% of Americans reporting using the service.⁹ Targeted ads, visually appealing websites, and utilizing various platforms can be incredibly effective at reaching large numbers of people.

A. Types of social media websites used by MS4 communities

Facebook: Facebook is an excellent resource for posting events and keeping track of potential attendees, as well as updates on community stormwater efforts – See [Roanoke](#) and [Lansing](#) for examples of how this platform is used for stormwater.

Twitter: This platform is most effective for real-time updates and outreach. See [Roanoke](#).

LinkedIn: While this social media platform was only found to be used by Boston, they have over 1,000 followers. They post general stormwater updates along with their municipal water and sewer information. See [Boston](#).

Instagram: As a photography and image sharing website, Instagram is great for visualizing stormwater efforts. See [Boston](#) and [Bangor](#).

Nextdoor: Nextdoor is a growing social media network that is hyperlocal and is centered around local issues, questions, and comments in specific neighborhoods. Here in Maine, many neighborhoods in Portland have a presence on the website. See [Roanoke](#).

Youtube: Youtube is the most used social media platform in America. MS4 communities across the country have Youtube pages that are mostly educational and PSA videos. See [Lincoln](#)

B. Effective social media methods

For the purposes of this research, effective social media methods were essentially considered those with high levels of interaction with the public, as well as those who saw social media followers and interactions increase over time.

⁹<https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/>

1. Geographic Targeting

Lansing, MI: Lansing has a strong Facebook presence, which is run through their regional commission¹⁰. They use various videos and graphics to support their posts. They also use social media data from Facebook to track interactions with posts. In 2018, their Facebook content reached 385k people, had 4,636 likes on posts, 1,210 comments, and 1,858 shares. They used paid social media ads and geographic targeting to expand their Facebook interactions by 700% in 2018 alone. They combined information from their survey results to connect with target populations that didn't know a lot about stormwater and found great success.

2. Survey Based Population Targeting

Santa Barbara, CA: Santa Barbara hires a survey company to target certain population demographics. This allows them to target based on population demographics, as well as geography. They also ask questions regarding how much residents know about stormwater such as "when was the last time you thought about stormwater?" and connect them to the population demographics.

3. Diversified Social Media Strategy

Boston, MA: Boston, through the [Boston Water and Sewer Commission](#), has the largest social media network of all the municipalities in this research. They are an excellent example of the effectiveness of broad social media outreach. They have platforms on Facebook, Twitter, Instagram, LinkedIn, YouTube and Nextdoor. These accounts post information to remain in compliance with MCM 1 and MCM 2, as well as general water information for the city. This can be an effective strategy to maximize outreach while including information on all aspects of municipal water, including MCM 1 and MCM 2.

¹⁰ <https://www.facebook.com/GLRC4stormwater/>

VIII. Target Audience

In each MS4 permit, target audiences are outlined for communities. Sometimes, permits specify a few target audiences, while others have several. Some MS4 participants elect to target additional audiences outside of permit compliance to support their stormwater efforts (Table 4).

TABLE 4. COMMON AUDIENCES BEING TARGETED FOR STORMWATER POLLUTION OUTREACH.

	Homeowners	Local Vendors	Pet Owners	Septic Tank Owners	Homeowners Associations	Elected Officials	Developers & Contractors	Planners & Engineers	Students
Roanoke, VA	X	X	X	X					
Burlington, VT	X								X
ISWG, ME	X	X				X		X	X
Hartford, CT	X								X
Eugene, OR	X	X			X	X	X	X	X
Olympia, WA	X	X					X	X	X
Bend, OR	X	X			X	X	X	X	X
Yakima, WA		X					X	X	X
Peoria, AZ	X	X							
Evanston, IL	X	X					X		
Kenosha, WI							X		
Rochester, MN	X								

A. Notable Target Audiences

Volunteer Nonprofits: Burlington and South Burlington target pre-existing networks of nonprofits (especially environmental nonprofits) to get involved in stormwater workshops and education. They utilize the nonprofits' volunteer networks, email lists, and social media profiles.

IX. Stormwater Pollutants

Stormwater pollutants come in many forms in our communities. They pose a threat to our ecosystems, animal life, and overall health. MS4 permits require that communities target certain pollutants deemed significant in their area and spread awareness of their presence and mitigation techniques to reduce the amount of pollution in their communities.

TABLE 5. COMMON STORMWATER POLLUTANTS TARGETED BY EDUCATION AND OUTREACH CAMPAIGNS.

	Bacteria		Chloride	IDDE				Pesticides	Phosphorus		Litter
	Septic & Sewer	Pet Waste		Dumpsters	Carwash	HHW	Fats/Oils/Grease		Fertilizer	Soil Erosion	
Roanoke, VA	X				X	X		X	X		
Boston, MA	X		X				X				
Burlington, VT	X		X	X						X	
Hartford, CT	X					X			X		
Portsmouth, NH	X				X						
Eugene, OR	X				X			X		X	
Wilmington, DE				X				X	X		
Yakima, WA		X		X							
Peoria, AZ		X		X		X				X	
Evanston, IL			X		X	X	X	X	X		
Kenosha, WI		X			X	X		X	X		

X. Common MCM 1 Activities

Based on the MS4 communities selected for this review, the most common MCM 1 methods to deliver stormwater information to target audience included a mixture of digital and print.

Social Media Outreach: 18 Municipalities out of 18

Brochures, Newsletters, or Other Physical Media: 16 Municipalities out of 18

Electronic Newsletters: 11 Municipalities out of 18

XI. Common MCM 2 Activities

The diversity found in how MS4 communities meet their MCM 2 requirements may be due to whether they are addressing this MCM through regional collaboration or individual efforts and their local stormwater issues.

Workshops for Residents: 8 Municipalities out of 18

Storm Drain Markings: 7 Municipalities out of 18

Host Events with Local Partners: 5 Municipalities out of 18

Training for Public Works Employees: 5 Municipalities out of 18

Appear at Local Fairs/Festivals: 4 Municipalities out of 18

Rain Barrel Distributing: 3 Municipalities out of 18

Contests (poetry/poster/photography): 3 Municipalities out of 18

XII. Unique and Notable Activities

Some MS4 communities are using novel methods to raise stormwater awareness, provide information, and involve the public.

Sponsor 5k Road Race: [ISWG, ME](#)

Community Litter/Stream Pickups: [Rochester, MN](#)

Local Speaker Series: [Rochester, MN](#)

Video Game: [BASWG, ME](#)

Exhibit at Local Children's Museum: [BASWG, ME](#)

Science Festivals For Local Students: [BASWG, ME](#)

XIII. What is ISWG Currently Doing?

ISWG partners with the Cumberland County Soil & Water Conservation District (CCSWCD) to implement their MCM 1 and MCM 2 permit requirements. Based on current permit requirements for MCM 1, ISWG must provide stormwater awareness to the general public, raise awareness regarding stormwater pollution and MS4 permit program requirements amongst municipal staff and elected officials, address a best management practice through a targeted audience, and provide enhanced outreach to address a high priority stormwater issue either locally, regionally, or statewide. For MCM 2, ISWG must comply with all state and local Public Notice requirements and hold a public event centered around pollution prevention and water quality.

Social Media Campaigns: CCSWCD conducts several social media campaigns on behalf of ISWG. For MCM 1 Stormwater Awareness, they conduct a 6 month Think Blue Maine Facebook ad campaign featuring the “Think Blue Maine Ducky” PSA and use Google Analytics to track visitors to the Think Blue Maine website.^{11,12} During this paid ad campaign on Facebook, they reached a total of 21,803 users between December 27, 2018 and June 30, 2019. According to their Google analytics, between January 1, 2019 and June 30, 2019, they had 1,273 visits.¹³

CCSWCD also uses Facebook to post stormwater pollution prevention tips, advertise YardScaping workshops, reach target watershed audiences (Table 6), and to promote the MCM 2 Public Participation event, the Urban Runoff 5k.

TABLE 6. FACEBOOK METRICS OF ISWG’S 2019 WATERSHED TARGETED OUTREACH¹⁴.

Watershed	Reach	Frequency	Impressions	Post Engagement	Link Clicks	Link Click-Through Rate
What is a watershed? ¹⁵	3,711	2.78	10,320	765	22	0.21%
Brickyard Hollow (Yarmouth)	988	1.46	1,442	95	1	0.06%
Capisc Brook (Portland)	921	1.42	1,306	100	2	0.15%
Concord Gully Brook (Freeport)	1,370	1.39	1,899	108	2	0.17%
East Brach Piscataqua River (Cumberland)	697	1.44	1,004	88	2	0.20%
Goosefare Brook (Old Orchard Beach & Saco)	836	1.45	1,211	103	1	0.08%
Mill Brook (Westbrook)	1,139	1.31	1,487	115	2	0.13%
Mill Creek (Falmouth)	800	1.46	1,171	112	0	0%
Pleasant River (Windham)	1,662	1.42	2,362	126	3	0.13%
Red Brook (Scarborough)	853	1.36	1,156	107	2	0.17%
Tannery Brook (Gorham & USM)	1,000	1.24	1,244	110	4	0.32%
Thatcher Brook (Biddeford)	1,266	1.32	1,673	100	4	0.24%
Trout Brook (Cape Elizabeth & South Portland)	1,411	1.33	1,874	115	3	0.16%

Urban Runoff 5k and Green Neighbor Family Fest¹⁶: CCSWCD coordinates the annual Urban Runoff 5k and the City of Portland’s Green Neighbor Family Fest for ISWG’s MCM 2 compliance. These events focus on providing stormwater education and other environmental activities to the ISWG communities. To advertise for the event, CCSWCD conducts social media campaigns, partner with local radio and TV stations, perform outreach through their ISWG municipal representatives, and accept local business sponsors.



¹¹ <http://facebook.com/cumberlandswcd>

¹² <https://www.facebook.com/ThinkBlueME/>

¹³ ISWG partners with other Maine MS4 communities in the state to coordinate Think Blue Maine stormwater awareness messages.

¹⁴ Originally published in ISWG’s PY6 (2018-2019) Annual Report for MCM 1 and MCM 2.

¹⁵ This ad was targeted to all the ISWG communities during its run time (April 2, 2019 through June 26, 2019).

¹⁶ urbanrunoff5k.com



YardScaping Program: ISWG aims to reduce the use of pesticide and fertilizer yard care products by providing education to their target audience, homeowners. CCSWCD implements the YardScaping program through workshops, online watershed outreach, and partnering with 23 local nurseries, hardware stores, and Home Depots to help educate customers about YardScaping-friendly yard care products.

Municipal Education: CCSWCD distributes educational materials to and facilitates trainings for municipal staff. In addition, ISWG municipal representatives also perform their own in-house educational programs to elected officials and to municipally sanctioned commissions, boards, councils, and committees. CCSWCD and ISWG municipal representatives also provide trainings to relevant staff on good housekeeping.

Enhanced Outreach Efforts: ISWG and SMSWG representatives coordinated with Rep. Mattie Daughtry on LD 906 to provide educational materials on the detrimental impacts of coal tar sealant use. The bill was enacted by the legislature on June 18, 2019 and signed by Governor Mills on June 27, 2019. The sale of coal tar sealants will be prohibited beginning October 1, 2023 and their use the following year.

Student Outreach: Each year, CCSWCD sends educators to classrooms in ISWG communities to teach lessons related to stormwater issues. Each year, they reach over 1,500 students and provide almost 7,500 contact hours.

XIV. Recommendations for Maine Communities

This list of recommendations is not intended to be universal to every municipality. Every municipality has their own needs, budgets, staffing, and time constraints. These recommendations are based on what this research has shown to be effective elsewhere throughout the nation and could be applied to municipalities here in Maine.

Local speaker series: Local speaker series are not currently being used by ISWG. Rochester, MN is an example of an exceptional speaker series sponsored by their stormwater department. Local speakers can be used to educate decision makers on how to stay in compliance with both MCM 1 and MCM 2, especially if coupled with a specific interactive activity such as rain barrel training. These can be an easy, inexpensive, and effective method of ensuring a robust turnout and raising awareness of the general public about best practices.

Reach out to more nonprofits: Burlington and South Burlington target preexisting networks of nonprofits (especially environmental nonprofits) to get involved in stormwater workshops and education. It may be beneficial for ISWG to increase their partnerships with more local nonprofits and environmental groups to host events, use email lists, and social media networks, especially groups that may have an interest in environmental conservation but may not be educated on stormwater issues.

Explore other social media networks: Many municipalities have begun using Nextdoor, a hyperlocal social media platform, to sponsor paid advertisements and to post consistently on their own page. Among them are Boston and Roanoke, which have exceptional social media engagement. ISWG may want to consider using other social media networks such as LinkedIn and paid YouTube advertisements that other municipalities have found to be successful.

Increase partnerships with local businesses: Roanoke, VA and Bend, OR both partner with local companies to get messaging across and host events. This allows them to market to certain communities and groups that they may otherwise not reach. It also allows them to use social media platforms and accounts outside of their control to reach certain populations. Partnering with local businesses that are willing to host interactive events can be counted toward compliance with both MCM 1 and MCM 2.

Consider implementing stormwater fees: Stormwater fees are becoming more common throughout the United States. Communities with stormwater fees aid in raising awareness of stormwater efforts, fund valuable stormwater efforts, and are usually the most effective at outreach (based on number of citizens reached and measured behavior change). Communities in Maine that adopt stormwater fees would undoubtedly help boost stormwater efforts and awareness.

Maintain interlocal collaboration: Using regional collaboration is crucial for complying with MS4 permits requirements. Many communities pooling resources is important not only for convenience, but also as a cost saving measure. Interlocal collaboration also boosts the effectiveness of public events through the number of participants reached and attending. Furthermore, municipalities do not have to dedicate city staff to MS4 compliance, which can be more expensive than contributing to an interlocal collaboration.

Continue training for elected officials: In Oregon, their MS4 permit requires educating local elected officials on stormwater issues in their communities. Training elected officials ensures that local government fully understands stormwater concerns and the MS4 permit governing their community. This training could also aid elected officials and decision makers to accurately evaluate future stormwater policies and ordinances.

Continue paid advertising: Municipalities that use paid advertising can track demographics, geography, interactions, and countless other data points from their websites and social media platforms. This is a productive and important way for ISWG to continue their education and awareness efforts. Outreach data is difficult to accurately track without tracking through social media. Paid advertising also provides data that maximize targeted outreach efforts.

XV. Conclusion

During this study, many MS4 MCM 1 and MCM 2 similarities were uncovered, along with some novel methods. New and established MS4 communities benefit from researching other stormwater programs to find cost-effective and impactful education, outreach, and participation methods to reach desired target audiences and reduce high priority stormwater pollutants.

Appendix A.

Table 7. Characteristics of Municipalities REFERENCED

Community	Regional Collaboration	Permit Cycle	Funding	External Marketing	Online Presence
Peoria, AZ	"STORM"	2016-2021	Not specified but seems to come from incorporating fees into sewer fees and water utility fees. They have \$75,000 in their city stormwater budget. See page 68: https://www.peoriaaz.gov/home/showdocument?id=21293	No	Twitter: https://twitter.com/PeoriaAZ Facebook: https://www.facebook.com/CityofPeoriaAZ/
Santa Barbara, CA	County level	2013-2019	Not specified, some of the MS4 permit compliance items have individual budget lines, others must be grouped with other departments. https://www.santabarbaraca.gov/SBdocuments/Advisory_Groups/Budget/Archive_2019/01%20Summary%20of%20Adopted%20Budget%20for%20Fiscal%20Year%202019/01_Summary%20of%20Adopted%20Budget%20for%20Fiscal%20Year%202019.pdf	Yes , they use multiple organizations. FM3 Research does their surveying.	Facebook: https://www.facebook.com/ProjectCleanWater/
Hartford, CT	No	2016-2022	Source is not specified. However, utilities accounts for \$25 million per year of their budget - including public works.	No , use the city public works department.	No
Wilmington, DE	New Castle County	2013-2018	Wilmington charges a stormwater fee based on square footage of impervious area. https://www.wilmingtonde.gov/home/showdocument?id=304	Yes , mostly through New Castle County, DE. https://www.nccde.org/223/Stormwater-Management	Twitter: https://twitter.com/deec_dns Facebook: https://www.facebook.com/nccde/ Instagram: https://www.instagram.com/nccde/
Evanston, IL	No	2013-2019	Source is not specified but do not utilize a stormwater fee.	No , mostly done by city staff.	Use municipal accounts.
Boston, MA	No	2018-2023	They charge stormwater inspection fees when inspecting industrial sites. https://www.bwsc.org/builders-	Yes , the public works commission. https://www.bwsc.org/	Social media accounts linked: https://www.bwsc.org/about/contact

			contractors/site-plan-requirements/special-service-fees		
Bangor, ME	Bangor Area Stormwater Group (BASWG)	2013-2019	Pays a membership fee into BASWG based on percentage of Urbanized Area.	Yes , they use Pulse to post and monitor their digital presence.	Facebook: https://www.facebook.com/bangorareastormwatergroup/ Twitter: https://twitter.com/baswg Instagram: https://www.instagram.com/bangorareastormwatergroup/ Website: https://www.baswg.org/
Lewiston, ME	Androscoggin Valley Stormwater Working Group (AVSWG)	2013-2019	Lewiston charges a stormwater fee that depends on the property/surface area. https://www.lewistonmaine.gov/DocumentCenter/View/545/078-StormWaterFeeScheduleAndCreditPolicy?bidId=	Yes , they share online resources with ISWG.	Post through municipal accounts and Think Blue Maine.
Portland, ME	Interlocal Stormwater Working Group (ISWG)	2013-2019	Pays a flat membership fee into ISWG.	Yes , they use Cumberland County Soil & Water Conservation District to post and monitor their digital presence.	Most outreach occurs through Think Blue Maine or CCSWCD's accounts. Facebook: https://www.facebook.com/cumberlandswcd/ https://www.facebook.com/ThinkBlueME/ Website: thinkblumaine.org
Lansing, MI	Greater Lansing Regional Committee for Stormwater Management (GLRC)	2013-2018	Pay dues into the tri-county group. The 2018 budget for the Greater Lansing area was \$125,500. https://docs.wixstatic.com/ugd/d33753_0d3343e438c24adab678171a95d06971.pdf	Yes , they use the GRLC.	Facebook: https://www.facebook.com/GLRC4stormwater/
Rochester, MN	No	2013-2019	Charges a baseline fee based off a Land Use Factor. https://library.municode.com/mn/rochester/codes/code_of_ordinances?nodeId=PTIICOOR_TIT12UTOTPUSE_CH12-7STUT	No	Use municipal accounts.

Portsmouth, NH	Seacoast Stormwater Coalition	2017-2022	No stormwater fee; uses other form of funding.	No , use the city's public works department.	Does not appear to use social media for stormwater education & outreach.
Bend, OR	No	2015-2020	Charges monthly stormwater fee based on impervious surface coverage and is set at \$5.46 per Equivalent Residential Unit (ERU). One ERU is equivalent to 3,800 square feet of impervious surface coverage. https://www.bendoregon.gov/government/departments/utilities/stormwater/about-stormwater/stormwater-utility-fee	No	Twitter: https://twitter.com/CityofBend Facebook: https://www.facebook.com/CityofBendOregon/ Website: https://www.bendoregon.gov/government/departments/utilities/stormwater/clean-water-works
Eugene, OR	No	2019-2024	Charges a monthly fee based on land use. https://www.eugene-or.gov/467/Fees-and-Charges	No	Use public utilities and other municipal pages.
Roanoke, VA	No	2018-2023	Charges a fee of \$0.90 per 500 square feet of impervious. The marketing firm costs Roanoke \$20,000 per year.	Yes , The Clean Valley Council https://cleanvalley.org/	Twitter: https://twitter.com/roanokestormh2o Instagram: https://www.instagram.com/roanoke_stormwater/ Facebook: https://www.facebook.com/roanokestormwater/ Pinterest: https://www.pinterest.com/RoanokeStormH2O Also posts to Nextdoor website.
Burlington, VT	Chittenden County Regional Planning Commission	2018-2023	Charges a stormwater fee based on residential size. Single Family: \$6.60/month Duplex: \$6.56/month Triplex: \$7.56/month. https://www.burlingtonvt.gov/DPW/Stormwater-Management	Yes , the Winooski Natural Resources Conservation District http://winooskinrcd.org/	Twitter: https://twitter.com/btvdpw Facebook: https://www.facebook.com/pg/BTVDPW/posts/ https://www.facebook.com/rethinkrunoff/ Rethink Runoff: http://rethinkrunoff.org

South Burlington, VT	Chittenden County Regional Planning Commission	2018-2023	Charge a stormwater utility fee. Total FY18 stormwater budget was \$3,052,609. Total of payment made to RSEP and Chittenden County Stream Team (CCST): \$5,500	Yes , the Regional Stormwater Education Program (RSEP) creates and distributes educational materials related to stormwater. Pluck compiles all information and marketing for them. See page 13 https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/MS4/S%20Burlington%20AnnualReport2018.pdf	Some posts through municipal pages. Facebook: https://www.facebook.com/rethinkrunoff/ Rethink Runoff: http://rethinkrunoff.org
Olympia, WA	No	2013-2019	Olympia incorporates a stormwater fee into their utility fee. http://olympiawa.gov/city-utilities/rate-information.aspx	No	Twitter: https://twitter.com/cityofolympia Facebook: https://www.facebook.com/cityofolympia/
Yakima City, WA	No	2014-2019	Yakima charges a stormwater fee. https://www.yakimawa.gov/services/wastewater-treatment-plant/stormwater/stormwater-assessment-fees/	No , use their public works department.	Use municipal pages. Facebook: https://www.facebook.com/cityofyakimafb/
Kenosha, WI	County level	2012-2018	They charge a stormwater fee based on impervious service. They spent ~\$10,000 on MCM 1 and ~\$35,500 on MCM 2 in 2016. https://www.kenosha.org/images/public-works/swu/2016MS4Permit.pdf	Yes , with the Southeastern Wisconsin Clean Water Network.	Website: http://www.rootpikewin.org/swcwn

TABLE 8. MCM 1 DETAILS OF MUNICIPALITIES REFERENCED

Community	MCM 1 Requirement	MCM 1 Implementation	MCM 1 Evaluation
Peoria, AZ	<p>The educational program shall define goals, express specific messages, define the targeted audience for each message, and identify responsible parties for program implementation. At a minimum, the program shall provide information concerning the impact of stormwater discharges on water bodies within the community. The permittee shall identify methods that it will use to evaluate the effectiveness of the educational messages and the overall education program. See page 13: http://static.azdeq.gov/permits/sm_ms4%20permit_final.pdf</p>	<p>Targeted Pollutants: Water conservation, recycling program, household hazardous waste, pet waste, and trash management. Audience: Primarily the general public, commercial and residential areas, and public works employees. Delivery: Brochures, booklets, mailings, distribution of takeaway items, signage. Places these in key city locations. Conduct trainings for public works employees. Maintains various social media websites. See page 16: https://www.peoriaaz.gov/home/showdocument?id=16421</p>	<p>Track and measure number of events, attendees, and educational materials distributed. See page 17: https://www.peoriaaz.gov/home/showdocument?id=16421</p>
Santa Barbara, CA	<p>Implement Community-Based Social Marketing requirements for public education and outreach and staff and site operator training for IDDE, construction, and good housekeeping/pollution prevention. See page 27: https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phsii2012_5th/order_final.pdf</p>	<p>Target Pollutants: Sediment, nutrients, bacteria, hydrocarbons, pesticides, and metals (Zn, Mg, Fe, K, Pb, etc.). Audience: Youth, adults, families, businesses. Delivery: Talks, events, neighborhood meetings, newsletters, signs, PSA, brochures, posters, classroom lessons, business certification programs. See page 25: https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=16657</p>	<p>Use a surveying company to test effectiveness of their public education marketing. See page 3: https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=219402</p>
Hartford, CT	<p>The education program shall include, but not be limited to, information on management of pet waste, application of fertilizers, herbicides, and pesticides, impervious cover and impacts of illicit discharges and improper disposal of waste into the MS4</p>	<p>Targeted Pollutants: Phosphorus, nitrogen, bacteria, mercury, and pet waste. Audience: Students and homeowners. Delivery: Brochures, newsletters, workshops, local Neighborhood Revitalization Zone meetings, Hartford Homeowners’ Resource Events and online.</p>	<p>Distributed materials to various homeowners and residents. No real measure of how useful this was on their reports.</p>
Wilmington, DE	<p>The permittees shall develop and implement an education and outreach program utilizing available media of their</p>	<p>Target Pollutants: IDDE, vehicle fluids, household hazardous waste, yard waste, pet waste, pesticides, herbicides, and fertilizers.</p>	<p>They attain 205,400 impressions each year on social media and websites, out of approximately</p>

	<p>choosing that is designed to: 1) increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; 2) change the behavior of target communities to reduce pollutant releases to MS4s and the environment; and 3) decrease the discharge of pollutants to the MS4s by engaging the public. See page 10 https://www.wilmingtonde.gov/home/showdocument?id=732 *MCM 1 and MCM 2 requirements are combined in the Delaware MS4 permit.</p>	<p>Audience: General public, homeowner associations, car owners, and nonprofit fundraiser groups. Delivery: Digital and print media, online ads and surveys, partner with local organizations. See page 105: https://www.wilmingtonde.gov/home/showdocument?id=730</p>	<p>450,000 people in the county. They use surveys to evaluate MCM 1.</p>
Evanston, IL	<p>Develop information for public on effective pollution prevention to minimize discharge of pollutants from private property. Develop information for public about green infrastructure strategies such as green roofs, rain gardens, etc. that mimic natural processes and direct stormwater to where it can be infiltrated, evaporated, or reused. See page 7: https://www2.illinois.gov/epa/Documents/iepa/water-quality/surface-water/storm-water/ms4/general-ms4-permit.pdf</p>	<p>Targeted Pollutants: Fuels and oils (including vehicles leaks); Soaps, solvents or detergents used in outdoor washing of vehicles and other property; Paint; Lawn and garden care; Winter de-icing materials (storage & use). Targeted Audience: Developers, businesses, residents, and homeowners. Delivery: Website, electronic newsletters, printed materials in city locations, educational displays, press releases, social media. See page 5: https://www.cityofevanston.org/home/showdocument?id=37075</p>	<p>Measure effectiveness through attendees and publishing information in the Chicago Tribune. See page 5: https://www.cityofevanston.org/home/showdocument?id=41269</p>
Boston, MA	<p>The parties must target: (1) residents, (2) businesses, institutions (churches, hospitals), and commercial facilities, (3) developers (construction), and (4) industrial facilities. The permittee shall distribute a minimum of two (2) educational messages over the permit term to each audience identified above. The program shall show evidence of focused messages for specific audiences as well as evidence that progress toward the defined educational goals of the program</p>	<p>Targeted Pollutants: Bacteria and nutrient impaired waters. Chloride (salt), oil and grease. Audience: The groups outlined in the permit. Delivery: Commission website, billing inserts, social media (Twitter, Facebook, Nextdoor). Boston public schools work.</p>	<p>Track the number of likes they have on their pages and the amount of messaging they pass out/mail.</p>

	has been achieved. See page 30: https://www3.epa.gov/region1/npdes/stormwater/ma/2016fpd/final-2016-ma-sms4-gp.pdf		
Bangor, ME	Three goals: 1) raise awareness that polluted stormwater runoff is the most significant source of water quality problems for Maine’s waters; 2) motivate people to use Best Management Practices which reduce polluted stormwater runoff; 3) reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs. See page 13: https://www.maine.gov/dep/water/wd/ms4/2013_Municipal_MS4_GP.pdf	Target Pollutants: Chlorides, litter, pet waste, pesticides, fertilizers, and household hazardous waste. Audience: General public, municipal/government officials, employees, staff, and volunteers. Delivery: Bus wraps, print and digital media, video game, and radio spots. See page 9: https://www.baswg.org/wp-content/uploads/2015/11/BASWG-Regional-SWMP-Revised-12-17-13.pdf	Track the number of attendees, bus ridership, materials sent out, website and social media analytics.
Lewiston, ME		Targeted Pollutants: Lawn clippings and pet waste, runoff into the Androscoggin River. Audience: Not specified, general population of Lewiston/Auburn. Delivery: Print and digital media, workshops/tours, and presentations.	Track the number of attendees, materials sent out, website and social media analytics. See page 7: https://www.lewistonmaine.gov/DocumentCenter/View/6582/Permit-3-Year-2-report?bidId=
Portland, ME		Targeted Pollutants: Coal tar, pesticides, fertilizers, pet waste, IDDE. Audience: General public, students, homeowners, municipal officials, employees, staff, and volunteers. Delivery: Workshops, tabling events, print and digital media, classroom lessons, and presentations. https://cumberlandswcd.org/site/iswg/iswg-minimum-control-measures-mcms/iswg-minimum-control-measure-1/	Track the number of attendees, materials provided, website and social media analytics.
Lansing, MI	Promote public responsibility and stewardship in the applicant’s watershed(s). Inform and educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have on surface waters of the state. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper	Target Pollutants: IDDE; surfactants from cars, pavement, and power washing; yard waste; pesticides; fertilizers; pest waste; household hazardous waste; and septic systems. Audience: General public Delivery: Digital and print media, public meetings, workshops, trainings, and events.	Completed an extensive summer survey to look at where the group had shortcomings. See page 7: https://docs.wixstatic.com/ugd/d33753_0d3343e438c24adab678171a95d06971.pdf They also use social media data to track interactions with posts. In 2018, they reached 385k people,

	<p>disposal of materials into the MS4. Promote preferred cleaning materials and procedures for car, pavement, and power washing. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers. See page 5: https://docs.wixstatic.com/ugd/d33753_130bcaad4654496c8a694375df903cd9.pdf</p>	<p>See page 40: http://www.lansingtownship.org/Portals/26/Lansing%20Township%20MS4%20Application%20(SWMP).pdf</p>	<p>had 4,636 likes, 1,210 comments, and 1,858 shares on Facebook. They used paid social media ads and geographic targeting to expand their Facebook interactions by 700% in 2018 alone. They combined information from the survey to hit target populations.</p>
Rochester, MN	<p>Specifically selected stormwater-related issue(s) of high priority to the permittee to be emphasized during this permit term (e.g., specific TMDL reduction targets, changing local business practices, promoting adoption of residential BMPs, lake improvements through lake associations, responsible management of pet waste, household chemicals, yard waste, deicing materials, etc.). Target audience(s), including measurable goals for each audience. (2) Responsible Person(s) in charge of overall plan implementation (3) Specific activities and schedules to reach measurable goals for each target audience (4) A description of any coordination with and/or use of other stormwater education and outreach programs being conducted by other entities. See page 10: https://www.pca.state.mn.us/sites/default/files/wq-strm4-59k.pdf</p>	<p>Targeted Pollutants: Litter, waste management, yard waste, chlorides, pet waste, Audience: General public Delivery: Digital and print media, and presentations/activities. https://www.rochestermn.gov/home/showdocument?id=1057</p>	<p>In 2018, presentation attendees and activity participants: 13,665; stormwater related events: 49; total contacts: 11,201,500! https://www.rochestermn.gov/home/showdocument?id=24871</p>
Portsmouth, NH	<p>The educational program shall define educational goals, express specific messages, define the targeted audience for each message, and identify responsible parties for program implementation. At a minimum, the program shall provide information concerning the impact of stormwater discharges on water bodies</p>	<p>Targeted Pollutants: Pet waste, bacteria, car wash runoff. Audience: General population of Portsmouth. Delivery: In local schools, as well as radio, TV, and social media ads.</p>	<p>Tracked online analytics, distributed print and digital materials, number of events, presentations, and attendees. See page 3: https://www3.epa.gov/region1/npdes/stormwater/assets/pdfs/nh/ports/2017/PortsmouthNH17.pdf</p>

	<p>within the community, especially those waters that are impaired or identified as priority waters. The program shall identify steps and/or activities that the public can take to reduce the pollutants in stormwater runoff and their impacts to the environment. See page 27: https://www3.epa.gov/region1/npdes/stormwater/nh/2017-small-ms4-general-permit-nh.pdf</p>		
Bend, OR	<p>The permit registrant must distribute or offer at least two (2) educational messages or activities per year. The permit registrant must at minimum, conduct education and outreach to each target audience identified at least once during the permit term, construction site operators must be targeted at least twice. In each corresponding Annual Report, the permit registrant must assess their progress toward implementation of the program, including the evaluation of at least one education and outreach activity. See page 13: https://www.oregon.gov/deg/FilterPermitsDocs/ms4ph2genpermit.pdf</p>	<p>Targeted Pollutants: Fertilizers, litter, trash, recycling, septic systems, impervious surface. Audience: General public, homeowners, homeowner association, schoolchildren, and businesses (including home-based and mobile business). Local elected officials, land use planners and engineers. Construction site operators. Delivery: Brochures or newsletters); electronic materials (for example, social media, websites, or e-newsletters); mass media (for example, utility bill inserts, transit advertisements, newspaper articles or public service announcements); targeted workshops.</p>	<p>The City of Bend has several notable efforts: 6,000 people signed up to receive emails. People spend an average of 1 minute and 30 seconds on their website. They utilize multiple videos and partner with local groups. They also have a training video that they show new city employees. See page 26: https://www.bendoregon.gov/home/showdocument?id=39351</p>
Eugene, OR	<p>The permittee must implement an education and outreach program designed to achieve measurable goals based on target audiences, specific stormwater quality issues in the community, or identified pollutants of concern. See page 7: https://www.eugene-or.gov/DocumentCenter/View/4678/Eugene-MS4-Permit?bidId=</p>	<p>Targeted Pollutant: Recycling, pet waste, car wash runoff, pesticides, septic systems, and IDDE. Audience: General public, homeowners, homeowner association, schoolchildren, and businesses (including home-based and mobile business). Local elected officials, land use planners and engineers, construction site operators. Delivery: Educational messages or activities may include printed materials (e.g. brochures or newsletters); electronic materials (e.g. social media, websites or e-newsletters); mass media (e.g. utility bill inserts, transit advertisements, newspaper articles or</p>	<p>Conducted biennial surveys, tracked number of program/presentation attendees, marked storm drains, and educational materials distributed. See page 26: https://www.eugene-or.gov/DocumentCenter/View/37302/Final-2017-Report-with-Appendices?bidId=</p>

		public service announcements); targeted workshops, or other educational events or formats.	
Roanoke, VA	<p>General Education Plan: 1. Increase public knowledge on how to reduce stormwater pollution; 2. Increase public knowledge of IDDE; 3. Implement diverse program with strategies that target individuals or groups most likely to have impacts.</p> <p>High Priority Plan: 1. Clearly identify the high-priority stormwater issues; 2. Explain the importance of the high-priority stormwater issues; 3. Include measures or actions the public can take to minimize the impact of the high priority stormwater issues; and 4. Provide a contact and telephone number, website, or location where the public can find out more information. See page 5 https://law.lis.virginia.gov/admincode/title9/agency25/chapter890/section40/</p>	<p>Targeted pollutants: Bacteria, PCBs, sediment reduction, IDDE, pet waste, lawn management, car washing, and septic awareness.</p> <p>Audience: "as wide a demographic as possible". With certain demographics such as dog owners and septic tank users, the city uses targeted ads based on tax records.</p> <p>Delivery: Brochures, door hangers, post cards, yard signs, posters, bus ads, digital media (social media promotions). See page 7 https://www.roanokeva.gov/DocumentCenter/View/12623/MS4-2018-2023-Program-Plan_FINAL-10119</p>	<p>They used a mix of social media tracking and recording attendees at public events. Also keep a tally of how much literature is distributed.</p> <p>See page 10 https://www.roanokeva.gov/DocumentCenter/View/13394/2019-City-of-Roanoke-MS4-Annual-Report</p>
Burlington, VT	<p>1. Implement a public education program to educate the public. 2. Include steps the public can take to reduce pollutants. 3. Maintain a website. 4. Maintain a program to identify opportunities for and provide technical assistance to landowners in the implementation by landowners of low impact BMPs. 5. Participate in the Chittenden County Regional Planning Commission or another regional stormwater education strategy approved by the Agency. See page 15: https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/MS4/Burlington%20SWMP%204-15-19.pdf</p>	<p>Targeted Pollutants: Bacteria, illicit discharge, chloride.</p> <p>Audience: General population of Chittenden County.</p> <p>Delivery: The County Regional Planning Commission partners with 3 municipal partners and 15 non-municipal partners from various interest areas in the community such as sailing organizations, garden networks, schools, etc. They have these groups share stormwater information on events and education through brochures, social media, and online and print newsletters. See page 2: https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/MS4/Burlington%20SWMP%204-15-19.pdf</p>	<p>They use software to track % of emails open (25%), number of subscribers, opened links, clicks, and number of online and paper newsletters distributed. They use surveys to track and improve their outreach.</p>
South Burlington, VT	<p>https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/MS4/VT%20MS4%20GP%202018.pdf</p>	<p>Target Pollutants: Soil erosion.</p> <p>Audience: General population of the county, as well as South Burlington.</p>	<p>Visitors to RSEP website www.smartwaterways.org: 7,832 Visitors on the City's stormwater web site www.sburlstormwater.com: 2,389</p>

		<p>Delivery: They use social media and website outreach mostly. A lot of the work is outsourced to the county planning commission and the marketing firm Pluck.</p> <p>See page 13: https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/MS4/S%20Burlington%20AnnualReport2018.pdf</p>	
Olympia, WA	<p>The SWMP shall include an education and outreach program designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities. The education program may be developed and implemented locally or regionally. See page 17: https://ecology.wa.gov/DOE/files/e9/e9264440-348e-4193-b8b0-c4891eb22449.pdf</p>	<p>Target Pollutants: Use and storage of pesticides and fertilizers and other household chemicals. Pet waste management and disposal. Use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.</p> <p>Audience: General public (including school age children), and businesses (including home-based and mobile businesses). Engineers, contractors, developers, and land use planners.</p> <p>Delivery: Digital and print media, pet waste stations, rain garden grants, and trainings/workshops.</p>	<p>Featured stormwater related messaging within stormwater and sewer bills monthly, tracked newsletter distribution (2,000 electronic newsletters, 10,000+ physical newsletters). Encouraged responsible pet ownership at Run Like a Dog 5k event. See page 4: http://m.olympiawa.gov/~media/Files/PublicWorks/Water-Resources/SWMPPlan_2018.pdf</p>
Yakima City, WA	<p>Permittees shall implement a public education and outreach program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges to water bodies and the steps the public can take to reduce pollutants in stormwater. Outreach and educational efforts should include a multimedia approach and shall be targeted and presented to specific audiences for increased effectiveness. See page 15: https://apps.ecology.wa.gov/paris/DownloadDocument.aspx?id=285296</p>	<p>Targeted Pollutants: Common business pollutants (e.g. restaurant dumpsters and wastewater), use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps, and other hazardous materials.</p> <p>Audience: General public, school aged children, engineers, construction contractors, developers, development review staff, and land use planners, businesses.</p> <p>Delivery: Multimedia</p>	<p>Publicized a hotline telephone number for public reporting of spills and other illicit discharges. Implemented an ongoing illicit discharge training program for all municipal field staff. The permit doesn't require the city to maintain a website, so a lot seems to be done at the state level.</p>
Kenosha, WI	<p>The permittee shall use at least 4 public education delivery mechanisms each year. See page 8: https://dnr.wi.gov/topic/StormWater/documents/WPDES-WI-S050075.pdf</p>	<p>Target Pollutants: Household Hazardous Waste Disposal, Pet Waste Management, Vehicle Washing, Yard Waste Management, Pesticide and Fertilizer Application.</p> <p>Audience: Construction developers, citizens.</p>	<p>Tracked number of events held. See page 2: https://www.kenosha.org/images/public-works/swu/2016MS4Permit.pdf</p>

		Delivery: Passive print media (brochures at front desk, posters, etc.), distribution of print and digital media (mailings, newsletters, etc.), media offerings (radio and TV ads, press release, etc.), social media posts, signage, website.	
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TABLE 9. MCM 2 DETAILS OF MUNICIPALITIES REFERENCED

Community	MCM 2 Requirement	MCM 2 Implementation	MCM 2 Evaluation
Peoria, AZ	All public involvement activities shall comply with state and local public notice requirements. The SWMP and all annual reports shall be available to the public. The permittee is encouraged to satisfy this requirement by posting records online. The permittee shall report on the activities undertaken to provide public participation opportunities. See page 13: http://static.azdeq.gov/permits/sm_ms4_%20permit_final.pdf	Update municipal website with stormwater educational materials, host a series of events (river cleanups, household hazardous waste days, classes, trainings, and environmental community festivals), monitor hotline for IDDE and other public work concerns, and install new storm drain markers. See page 21: https://www.peoriaaz.gov/home/showdocument?id=16421	Track website visits, number of event attendees, hotline complaints addressed, and storm drain
Santa Barbara, CA	...The Permittee shall involve the public in the development and implementation of activities related to the program. The public participation and involvement program shall encourage volunteerism, public comment and input on policy, and activism in the community. The Permittee shall also be involved in their Integrated Regional Water Management Plan or other watershed-level planning effort. See page 30: https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phsii2012_5th/order_final.pdf	Hold multiple volunteer events to clean up and maintain creeks and beaches, support the local Adopt-a-Beach program and efforts, participate in “Creek Week” and “Looking Good Santa Barbara” events, and post information to multiple websites, social media accounts, and email newsletters. See page 16: https://www.santabarbaraca.gov/civicx/filebank/blobdload.aspx?BlobID=188248	Use surveys, track attendees to all events, and use website and social media analytics.
Hartford, CT	The permittee shall provide opportunities to engage their community to participate in the review and implementation of the permittee’s Plan. The goal of this minimum control measure is to involve the community in both the planning and implementation process of improving water quality.	Hold multiple events (“Hartford Cleans Up”; promoted the UN’s World Environment Day; Rain Barrel Pickup Events in September and December), use public notices on DPW website, and hold annual Stormwater Committee meeting.	Track number of attendees to events and the number of bags, brooms, gloves, and rain barrels distributed. They report approximately 80 rain barrels in 2018.
Wilmington, DE	The education and outreach program shall include at least two public workshops each year...[and] a statistically valid public education survey to evaluate the effectiveness of the education and outreach program in increasing public awareness and changing behaviors about stormwater	Hold two public workshops each year; conduct two public education surveys. See page 111: https://www.wilmingtonde.gov/home/showdocument?id=730	Track participation and outreach metrics in addition to survey responses.

	<p>pollution. The permittees shall coordinate on conducting this public survey. See page 11: https://www.wilmingtonde.gov/home/showdocument?id=732 *MCM 1 and MCM 2 requirements are combined in the Delaware MS4 permit.</p>		
Evanston, IL	<p>Hold a public hearing regarding initial plan. Provide 15-day public comment period following the hearing. Advertise 10 days in advance. Hold one public meeting annually for the public to provide comment on the Annual Evaluation. Identify Environmental Justice Areas and receive comment. See page 7: https://www2.illinois.gov/epa/Documents/iepa/water-quality/surface-water/storm-water/ms4/general-ms4-permit.pdf</p>	<p>Schedule and advertise public hearings, develop Environmental Justice Area Report. See page 6: https://www.cityofevanston.org/home/showdocument?id=37075</p>	<p>Track meeting attendees, number of events, and volunteers at public events. See page 6: https://www.cityofevanston.org/home/showdocument?id=41269</p>
Boston, MA	<p>The permittee shall provide opportunities to engage the public to participate in the review and implementation of the permittee’s SWMP. See page 31: https://www3.epa.gov/region1/npdes/stormwater/ma/2016fpd/final-2016-ma-sms4-gp.pdf</p>	<p>Hold multiple public events and classroom presentations a month. See page 35: https://www.bwsc.org/sites/default/files/2019-03/Stormwater_Management_Report_2018_0.pdf</p>	<p>They track attendees to their events, including classroom events. See page 36: https://www.bwsc.org/sites/default/files/2019-03/Stormwater_Management_Report_2018_0.pdf</p>
Bangor, ME	<p>The goal of this minimum control measure is to involve the public in both the planning and implementation process of improving water quality and reducing stormwater quantity via the stormwater program...The permittee or regional stormwater group of which the permittee is a member shall annually host/conduct or participate in a public event. The event must include a pollution prevention and/or water quality theme. The target audience does not need to be the entire urbanized area but should be aimed at a segment of the population that the permittee wishes to reach.</p>	<p>Host or participate in at least one public event each year. See page 12: https://www.baswg.org/wp-content/uploads/2015/11/BASWG-Regional-SWMP-Revised-12-17-13.pdf</p>	<p>They track events hosted and attended with indicators of planning and effectiveness.</p>
Lewiston, ME	<p>The goal of this minimum control measure is to involve the public in both the planning and implementation process of improving water quality and reducing stormwater quantity via the stormwater program...The permittee or regional stormwater group of which the permittee is a member shall annually host/conduct or participate in a public event. The event must include a pollution prevention and/or water quality theme. The target audience does not need to be the entire urbanized area but should be aimed at a segment of the population that the permittee wishes to reach.</p>	<p>Hold various public events, as well as getting local students involved through a poster contest and visiting schools.</p>	<p>Annually, the AVSWG will participate in Public Works Day. Public Works Day is held each spring and has historically attracted around 200-300 people. Stormwater educational materials are presented and provided to attendees and stormwater pollution prevention</p>

			equipment are demonstrated and described to the public.
Portland, ME		Hosts and participates in the regional Urban Runoff 5k race held annually in April.	The track race participants, volunteers, and festival attendees.
Lansing, MI	The permittee shall include a process for notifying the public when and where the SWMP is available and of opportunities to provide comment. They shall also include a process for inviting public involvement and participation in the implementation and periodic review of the SWMP. See page 4: https://lansingmi.gov/DocumentCenter/View/817/National-Pollutant-Discharge-Elimination-System-Permit-Application-PDF?bidId=	Post SWMP on the City website and invite the public to review and comment through the City's website and GLRC website. Additionally, GLRC uses social media platforms to communicate to larger audiences. See page 3: https://lansingmi.gov/DocumentCenter/View/821/Attachment-A---Public-Education-Plan-PDF?bidId= See also: https://lansingmi.gov/DocumentCenter/View/820/Attachment-A---Action-Plan-PDF?bidId=	The GLRC regularly provides training opportunities for municipal field staff, but this year, members requested an additional event focused on continued education for their engineers, public service directors and elected officials. The GLRC listened and hosted their first Stormwater Seminar in June 2018. The event provided municipal decision makers an opportunity to hear experts present on new ways to fund, manage, and improve their stormwater program. See page 8: https://docs.wixstatic.com/ugd/d33753_0d3343e438c24adab678171a95d06971.pdf
Rochester, MN	Provide a minimum of one (1) opportunity annually for the public to provide input on the adequacy of the SWPPP. Public meetings can be conducted to satisfy this requirement provided appropriate local public notice requirements are followed and opportunity to review and comment on the SWPPP is provided. (2) Provide access to the SWPPP document, Annual Reports, and other documentation that supports or describes the SWPPP (e.g., Regulatory Mechanism(s), etc.) for public review, upon request. All public data requests are subject to the Minnesota Government Data Practices Act, Minn. Stat. § 13. (3) Consider public input, oral and written, submitted by the	They hold an annual meeting to report on annual permit progress; encourage citizens to report stormwater complaints, participate in the City's litter program and other environmental events, and attend local community events for program outreach. https://www.rochestermn.gov/home/showdocument?id=1057	In 2018, they held an annual meeting, had 4,385 volunteers pick up over 15,000 pounds of litter at 307 sites, installed 2 residential rain gardens, and marked 280 storm drains. See page 5: https://www.rochestermn.gov/home/showdocument?id=24871

	public to the permittee, regarding the SWPPP. See page 11: https://www.pca.state.mn.us/sites/default/files/wq-strm4-59k.pdf		
Portsmouth, NH	The permittee shall provide opportunities to engage the public to participate in the review and implementation of the permittee's SWMP. See page 29: https://www3.epa.gov/region1/npdes/stormwater/nh/2017-small-ms4-general-permit-nh.pdf	Hold annual council meeting; collaborate with public and private entities to increase awareness, as well as improve on design and implementation of stormwater treatment issues related to development; and hold TAC meetings to review and approve construction projects. See page 8: https://www3.epa.gov/region1/npdes/stormwater/assets/pdfs/nh/reports/2017/PortsmouthNH17.pdf	Held an annual meeting, TAC reviewed 27 projects, monitored community rain gardens, worked with local partners to improve local brooks, and continued implementing food and yard waste programs. See page 8: https://www3.epa.gov/region1/npdes/stormwater/assets/pdfs/nh/reports/2017/PortsmouthNH17.pdf
Bend, OR	The permit registrant must maintain and promote at least one publicly accessible website with information on the permit registrant's SWMP implementation, the SWMP Document, contact information, and educational materials. The permit registrant must, at a minimum, create or partner in the development of one stewardship opportunity during the permit term. The permit registrant must track implementation of the public involvement and participation requirements. See page 13: https://www.oregon.gov/deq/FilterPermitsDocs/ms4ph2genpermit.pdf	Create a public advisory group to help guide the development, implementation, and modification of the stormwater program; hold public meetings; and identify opportunities for community volunteers. See page 50: https://www.bendoregon.gov/home/showdocument?id=6401	Held bimonthly public meetings; invited targeted businesses to train their employees in Clean Water Works program (49 organizations participated); held field trips and public speaker talks; held student film contest. See page 36: https://www.bendoregon.gov/home/showdocument?id=39351
Eugene, OR	The permittee must implement a public participation approach that provides opportunities for the public to effectively participate in the development, implementation, and modification of the permittee's stormwater management program. See page 8: https://www.eugene-or.gov/DocumentCenter/View/4678/Eugene-MS4-Permit?bidId=	They incorporate public participation into their BMP for other minimum control measures. Most noticeably, their educational volunteer program. See page 12: https://www.eugene-or.gov/DocumentCenter/View/13245/Updated-SWMP-12-12?bidId=	Track the number of water body adoption groups, number of volunteer work parties, number of volunteers, and document annual large-scale events. See page 31: https://www.eugene-or.gov/DocumentCenter/View/37302/Final-2017-Report-with-Appendices?bidId=

Roanoke, VA	The permittee shall develop and implement procedures for 1. the public to report IDDE; 2. to provide input on the permittee’s MS4 program plan; 3. receiving public input or complaints; 4. responding to public input and complaints; 5. maintaining documentation; and 6. have a dedicated MS4 webpage. See page 7 https://law.lis.virginia.gov/admincode/title9/agency25/chapter890/section40/	They keep their webpage current with plans, reports, and other documentation. Conduct citizen science monitoring programs, rain barrel program, storm drain stenciling program, Household Hazardous Waste collection program, drug take-back program, and participate in regional planning. See page 19 https://www.roanokeva.gov/DocumentCenter/View/12623/MS4-2018-2023-Program-Plan_FINAL-10119	They used a mix of social media tracking and recording attendees at public events, meetings, and other activities. Also conducted follow up via phone and email with attendees. See page 17 https://www.roanokeva.gov/DocumentCenter/View/13394/2019-City-of-Roanoke-MS4-Annual-Report
Burlington, VT	1. The permittee shall develop and implement a public involvement and participation program and comply with applicable state and local public notice requirements. 2. Post the SWMP and annual reports on the permittee’s website. 3. Document its decision process for the development of a stormwater public involvement and participation program. 4. Implement the following public involvement and participation activities:	Participate in and provide financial support for operation of Rethink Runoff Stream Team and maintain an Adopt-a-Drain Program for residents. See page 4: https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/MS4/Burlington%20SWMP%20-15-19.pdf	Tracked financial contributions, number of attendees at events, and number of storm drains marked. See page 4: https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/MS4/S%20Burlington%20AnnualReport2018.pdf
South Burlington, VT	a) participate in the Chittenden County Regional Planning Commission public involvement and participation strategy, or b) participate in another regional stormwater public involvement and participation strategy approved by the Agency. See page 17: https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/MS4/VT%20MS4%20GP%202018.pdf	Participate in the Rethink Runoff program and storm drain stenciling program. See page 11: http://sburlstormwater.com/wp-content/uploads/2019/12/Revised_Amended_SoBu_SWMP_Only_20191218.pdf	Tracked financial contributions, number of attendees at events, and number of storm drains marked. See page 1: http://sburlstormwater.com/wp-content/uploads/2019/03/MS4AnnualReport2018.pdf
Olympia, WA	Permittees shall provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities. Each Permittee shall comply with applicable state and local public notice requirements when developing elements of the SWMP. See page 19: https://ecology.wa.gov/DOE/files/e9/e9264440-348e-4193-b8b0-c4891eb22449.pdf	Present plan to City’s Utility Advisory Committee and provide opportunity for public comment, post the SWMP to the City’s website, and update the SWMP as needed. See page 5: http://m.olympiawa.gov/~media/Files/PublicWorks/Water-Resources/SWMPPlan_2018.pdf	Discuss, review, and amend SWMP and NPDES annual reports through a formal public review process and post these documents on the City’s website. See page 1: http://olympiawa.gov/~media/Files/PublicWorks/Water-Resources/NPDES_2018_AnnualReport.pdf?la=en

<p>Yakima City, WA</p>	<p>Permittees shall provide ongoing opportunities for public involvement and participation such as advisory panels, public hearings, watershed committees, participation in developing rate-structures, or other similar activities. Permittees shall comply with applicable state and local public notice requirements when developing elements of the SWMP. See page 16: https://apps.ecology.wa.gov/paris/DownloadDocument.aspx?id=285296</p>	<p>Uses the Regional Stormwater Working Group website to host annual reports and SWMP and advertise and hold monthly meetings open to the public. See page 7: https://www.yakimacounty.us/DocumentCenter/View/20512/Annual-Report-2018</p>	<p>Conduct surveys, track events, meetings, and attendance. See page 48: https://www.yakimacounty.us/DocumentCenter/View/20512/Annual-Report-2018</p>
<p>Kenosha, WI</p>	<p>The permittee shall maintain its public involvement and participation program, in compliance with applicable state and local public notice requirements, to notify the public of activities required by this permit, and to encourage input and participation from the public regarding these activities. See page 10: https://dnr.wi.gov/topic/StormWater/documents/WPDES-WI-S050075.pdf</p>	<p>Hold events for community members to attend and can clean, beautify, and/or promote and implement stormwater practices.</p>	<p>Track number of events and attendees. See page 2: https://www.kenosha.org/images/public-works/swu/2016MS4Permit.pdf</p>